

The spider genus *Hersilia* in Thailand, with descriptions of two new species (Araneae, Hersiliidae)

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The spider genus *Hersilia* in Thailand, with descriptions of two new species (Araneae, Hersiliidae). - Our examination of a hersiliid spider collection from Thailand revealed eight species of which two species are new (*Hersilia serrata* sp. n. ♂, ♀, *H. thailandica* sp. n., ♂). Extended geographic ranges are recorded for *H. sundaiica* Baehr & Baehr, 1993 and *H. martensi* Baehr & Baehr, 1993, which are reported from Thailand for the first time. *H. asiatica* Song & Zheng, 1982, which was previously documented from northeastern Thailand, is now also found in northern and southern Thailand. A substantial number of females from Thailand are similar to *H. striata* Wang & Yin, 1985, previously known from China, but can be distinguished by slight differences in their genital morphology.

Keywords: Taxonomy - new taxa - new record - biodiversity - distribution range.

INTRODUCTION

To date ten species of Hersiliidae were found in Thailand. All of them belong to the cosmopolitan spider genus *Hersilia* Audouin. Prior to this study six species were known from Thailand. Unfortunately, the first hersiliid spider that was described from Thailand, *Hersilia siamensis* Simon, 1886, known only from the female type collected at 'Canal de Bangkok, Siam', is currently regarded as a *nomen dubium* (Baehr & Baehr, 1993: 78). This because the type is presumably lost (not found in the Muséum National d'Histoire Naturelle, Paris, France, or in the Museo Civico di Storia Naturale "Giacomo Doria", Genoa, Italy), and because the original description given by Simon (1886) did not include satisfactory taxonomic information to recognize or distinguish this species from its congeners (Baehr & Baehr, 1993). The other five taxa are: *H. vicina* Baehr & Baehr, 1993, *H. asiatica* Song & Zheng, 1982, *H. simplicipalpis* Baehr & Baehr, 1993, *H. striata* Wang & Yin, 1985 and *H. clypealis* Baehr & Baehr, 1993.

The present study treats six *Hersilia* species, two of which are new and two others recorded from Thailand for the first time. Therefore, a total of nine hersiliid species (excluding the doubtful *H. siamensis*) are currently known to occur in Thailand. Following Baehr & Baehr (1993), they can be separated into five species-groups: 1) the *albomaculata*-group (*H. martensi* and *H. vicina*); 2) the *asiatica*-group (*H. asiatica*); 3) the *savignyi*-group (*H. simplicipalpis*, *H. striata*, *H. clypealis*, *H. ser-*

rata sp. n.); 4) the *pectinata*-group (*H. thailandica* sp. n.); 5) the *impressifrons*-group (*H. sundaica*). This indicates not only a species-rich hersiliid fauna in Thailand, it also reveals that this fauna is superficially known and more taxonomic work needs to be done. This study also revealed that some *Hersilia* species have broad distribution ranges.

This article is the second in a series on faunistic and taxonomic studies on the Southeast Asian hersillids deposited in the spider collection of the Muséum d'histoire naturelle de la Ville de Genève, Switzerland.

MATERIAL AND METHODS

Morphological observation and illustration were made using Olympus SZX-9 and Nikon SMZ 800 stereomicroscopes, and an Olympus BX-40 compound microscope, each equipped with a drawing tube. Measurements of leg segments were taken from the dorsal side. All measurements are in millimeter. Epigynes were drawn in natural and cleared state (after immersing them in lactic acid for 10-20 minutes). Sizes of eyes are given as proportions of AME (= 1.00) in the following order: AME: ALE: PME: PLE. Leg measurements are given as: total length (femur, patella, tibia, metatarsus, tarsus).

Abbreviations used in text and in the figures are as follows: AF, apical flange of TA; ALE, anterior lateral eyes; AME, anterior median eyes; AP, apical projection of TA; BS, bulbous sacs of spermathecae; bS, basal segment of posterior spinneret; CO, copulatory orifice; DMP, dorsal muscular pits; E, embolus; FD, fertilization duct; IP, lateral process of TA; IPf, membranous flange on lateral process of TA; IPp, prong on lateral process of TA; IPr, projection on lateral process of TA; IPT, tubercle on lateral process of TA; mP, median process of TA; mPa, apical prong on median process of TA; mPb, basal prong on median process of TA; NP, national park; PLS, posterior lateral spinnerets; PME, posterior median eyes; PLE, posterior lateral eyes; SD, insemination ducts; SR, seminal receptacle; TA, tegular apophysis; tS, terminal segment of posterior spinneret; VMP, ventral muscular pits. In the text 'Fig.' refers to a figure herein, while 'fig.' refers to a figure published elsewhere.

The material examined will be deposited in the spider collection of the Muséum d'histoire naturelle de la Ville de Genève, Switzerland (MHNG) and in the Thailand Natural History Museum (TNHM) of the National Science Museum, Pathumthani Province, Thailand.

TAXONOMY

HERSILIIDAE THORELL, 1870

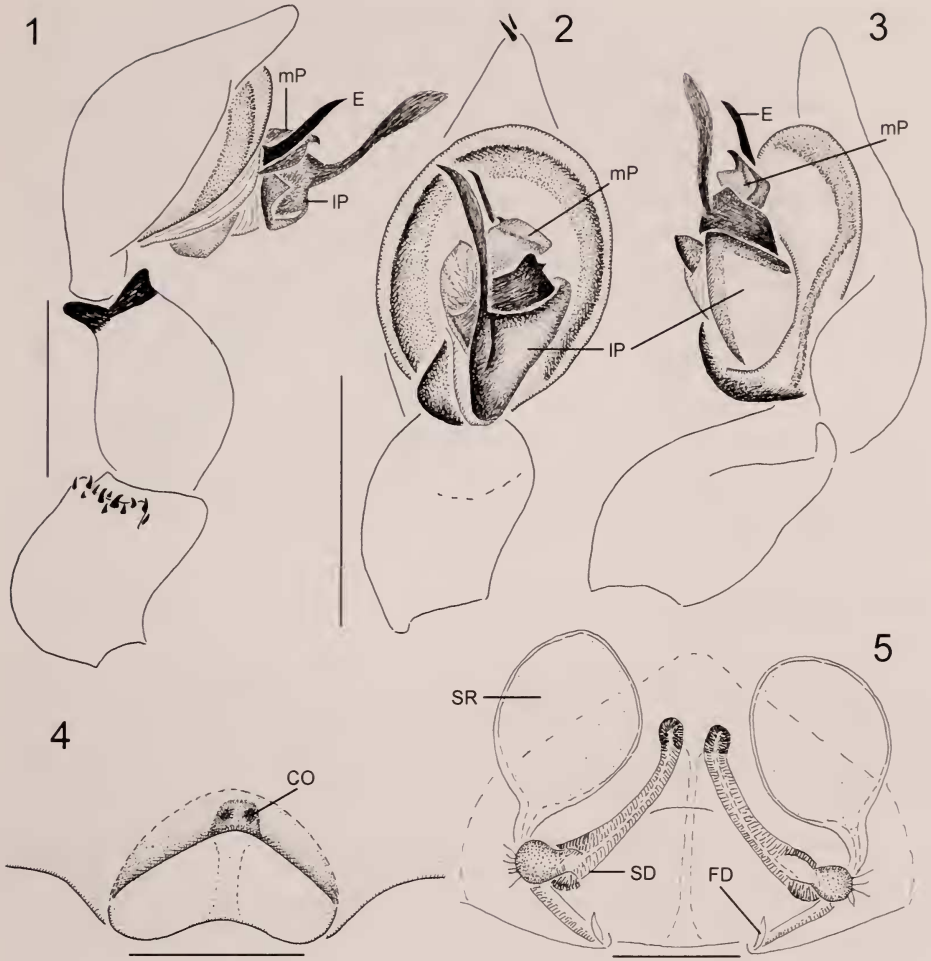
Hersilia Audouin, 1826

Hersilia asiatica Song & Zheng, 1982

Figs 1-5, 27

Hersilia asiatica Song & Zheng, 1982: 40, figs 1-5; Hu, 1984: 81, figs 74.1-5. – Song, 1987: 116, fig. 78; Feng, 1990: 48, figs 23.1-6. – Chen & Zhang, 1991: 78, figs 69.1-5. – Baehr & Baehr, 1993: 25, figs 20c-f. – Chen, 1994: 1, figs 1A-F. – Song, Zhu & Chen, 1999: 80, figs 32I-J, 33C-D. – Chen, 2007: 14, figs 1, 5-12.

NEW MATERIAL: MHNG-PDC-025454212111111; Thailand, Chiang Mai Province, Chiang Mai District, Doi Suthep-Pui NP, Doi Pui, Huay Khok Ma Watershed Station, 1200-1300



FIGS 1-5

Hersilia asiatica. (1) Left male palp, prolateral view. (2) Ditto, ventral view. (3) Ditto, retro-lateral view. (4) Epigyne, ventral view. (5). Vulva, dorsal view. Scale lines = 1.0 mm.

m; 1 male, 2 females; from a tree trunk in evergreen hill forest (closed canopy); 8.8.1999; leg. P. Dankittipakul. – MHNG-PDC-541354654020213163; Thailand, Nakhon Sri Thammarat Province, Tha Sala District, Khao Nan NP, 100-200 m; 1 female; beating shrub in dry lowland evergreen forest; 17.8.2006; leg. P. Dankittipakul. – TNHM-PDC-54651516514654; Thailand, Phetchabun Province, Lomsak District, Nam Nao NP, forests behind park headquarters, 600 m; 1 female; 16.-17.vii.2005; leg. P. Dankittipakul.

REMARKS: *Hersilia asiatica* is an extremely long-legged species. Males are recognized by: palpal patella with strongly sclerotized ridge carrying short erect spines, the ridge is recognized by a broad cleft (Fig. 1); embolus linear (Figs 1-3); median process of TA with prolateral denticle (Figs 1-2); lateral process of TA with sharply pointed anterior margin, and carrying an elongate process (Fig. 2). Females are

recognized by: epigyne a distinctly elevated mound with sclerotized anterior margin (Fig. 4); copulatory orifices situated anterior to sac-like membranous part of epigyne (Fig. 4); elongate tubular insemination ducts originating antero-medially, descending postero-laterally, connected to basal perforate sinusoids (Figs 5, 27); ovoid receptacula originating posteriorly, with tubular stalks (Fig. 5); fertilization ducts situated close to epigastric furrow, connected to vulva via short tubular ducts running obliquely (Fig. 5). Apart from the diagnostic characters given above and mentioned by Baehr & Baehr (1993), an additional feature was observed in the males examined: the lateral process of the TA bears a prolateral petal-shaped denticle (Figs 1, 3), its apex directed mesad. This structure is heavily sclerotized and sharply pointed in lateral view (Fig. 3); it is easily distinguishable from the median process of the TA which is less sclerotized and pigmented.

DISTRIBUTION: China, Thailand and Laos. *Hersilia asiatica* was previously recorded from northeastern Thailand (Khao Yai NP, Nakhon Ratchasima Province and Phu Kradueng NP, Loei Province) by Baehr & Baehr (1993). New localities reported herein extend the known distribution range of this species southwards to southern Thailand (Fig. 32).

***Hersilia sundaica* Baehr & Baehr, 1993**

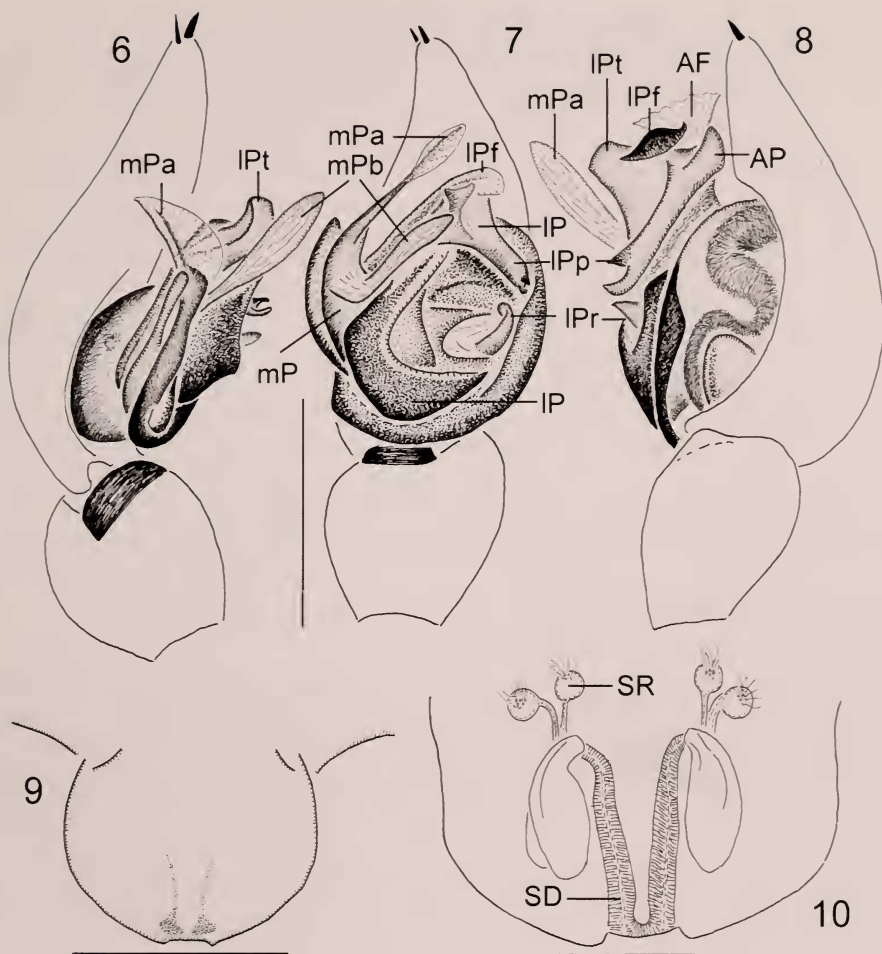
Figs 6-10, 28, 31

Hersilia sundaica Baehr & Baehr, 1993: 58, figs 38c-f.

NEW MATERIAL: MHNG-PDC-1488756462151465454; Thailand, Phetchabun Province, Khao Kho NP, forest behind park headquarters, 650 m; 1 male; 10.-15.11.2006; collected by Malaise trap; leg. P. Dankittipakul. – MHNG-PDC-545464654545787; Thailand, Sakon Nakhon Province, Phu Phan NP, 800 m; 1 female; 12.-15.9.2007; collected by Malaise trap; leg. P. Dankittipakul. – TNHM-PDC-8782511532551454514; Thailand, Loei Province, Phu Kradueng NP, 1200 m; 1 female; 18.-20.9.2007; collected by Malaise trap; leg. P. Dankittipakul.

REMARKS: *Hersilia sundaica* belongs to the *impressifrons*-group which can be easily recognized by the peculiar structure of the male palp: the TA is complicated, provided with: 1) a membranous apical flange with serrated margin (Fig. 8, AF), and a bifurcated apical prong directed postero-retrolaterad (Fig. 8, AP); 2) lateral process of TA (lP) a large sclerotized, C-shaped plate, partially membranous, retrolaterally with a spoon-shaped projection (Figs 6-8, lPr), anteriorly with a median tubercle clearly visible in retrolateral view (Fig. 8, lPt), a membranous flange (Figs 7-8, lPf), and an elongated prong directed posteriad, its apex bifurcated (Fig. 7, lPp); 3) median process of TA (mP) with two large prongs, a basal prong abruptly bent, obliquely directed anteriad (Fig. 7, mPb), apical prong elongated, its apex membranous, fan-like (Fig. 7, mPa). Females are recognized by the protruded epigyne extending posteriorly (Fig. 9), copulatory orifices situated close to excavated posterior margin; vulva (Figs 10, 28) provided with parallel insemination ducts running mid-longitudinally, ascending anteriorly then curving laterally to form large glandular apparatus (Fig. 28); two pilose, spherical receptacula (Fig. 31) with short stalks situated anteriorly. The females examined lack a glandular patch which is present in the female paratype from Indonesia.

NATURAL HISTORY: All specimens examined were collected by means of a Malaise trap suggesting that this species is rather active and does not stay on the same tree as previous observations made us believe.



FIGS 6-10

Hersilia sundaica. (6) Left male palp, prolateral view. (7) Ditto, ventral view. (8) Ditto, retrolateral view. (9) Epigyne, ventral view. (10) Vulva, dorsal view. Scale lines = 1.0 mm.

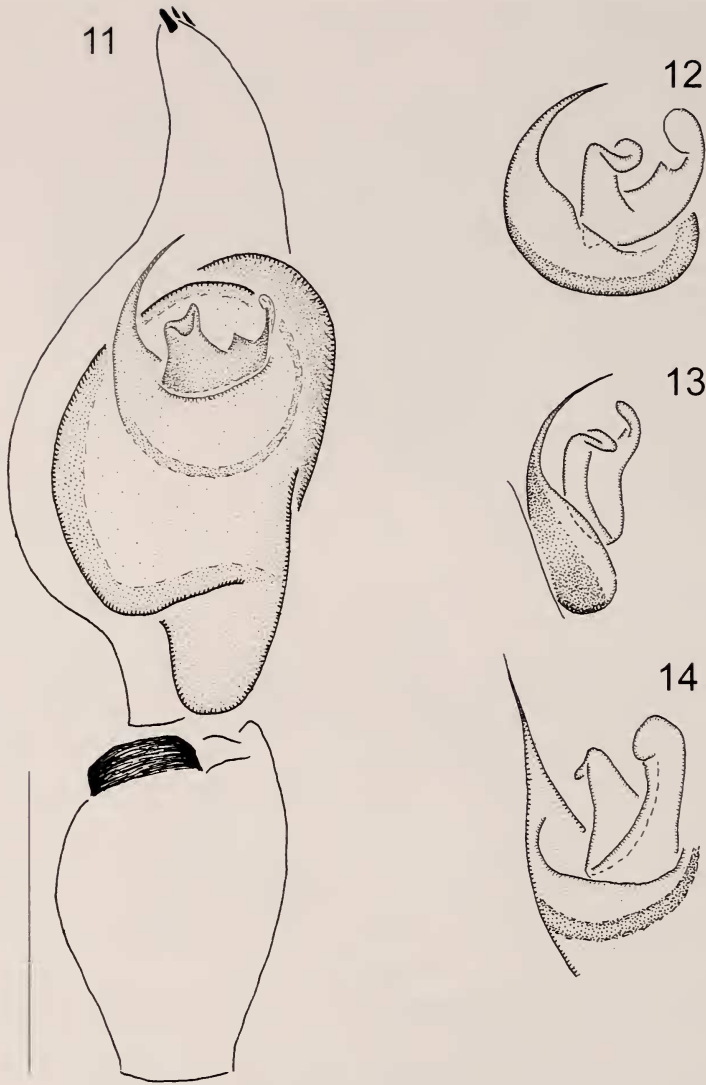
DISTRIBUTION: Indonesia (Lombok, Sumbawa) and Thailand (new record, Fig. 32). Although strong resemblance in genital morphology leave no doubt that the specimens examined belong to this species, it is important to note that the new specimens were collected very far away from the type localities on the Lesser Sunda Islands. *Hersilia sundaica* seems to have a broad distribution range. Additional material will hopefully become available from SE Asian countries in the future to confirm this.

***Hersilia martensi* Baehr & Baehr, 1993**

Figs 11-14

Hersilia martensi Baehr & Baehr, 1993: 21, figs 17c-d.

NEW MATERIAL: MHNG-PDC-78754131421545; Thailand, Phetchabun Province, Nam Nao NP; 1 male; 18.7.2006; beating in forest with open canopy behind park headquarters; leg. P. Dankittipakul.



FIGS 11-14

Hersilia martensi. (11) Left male palp, ventral view. (12) TA, ventral view. (13) Ditto, prolateral view. (14) Ditto, retrolateral view. Scale line = 1.0 mm.

REMARKS: The male of this species is recognized by a retrolateral extension on the male bulb (Fig. 11), by a curved embolus gradually narrowing towards its sharply pointed apex (Figs 11-14), and by the TA carrying a lightly sclerotized prolateral process and a membranous retrolateral flange (Figs 12-14).

DISTRIBUTION: Nepal and Thailand (new record, Fig. 32). As *H. sundaica*, this species is apparently widely distributed. It was described from Nepal and, as the first new record since its original description, is here documented from a forest in north-eastern Thailand.

***Hersilia serrata* sp. n.**

Figs 15-19, 30

HOLOTYPE: MHNG-PDC-24454512222-109; Thailand, Chiang Mai Province and District, Chiang Mai University campus, Ang Kaew, 300-350 m; 1 male; 4.10.2007; on a tree trunk in an open area; leg. P. Dankittipakul.

PARATYPES: MHNG-PDC-875415454545987321; from the type locality; 1 female; 10.11.2007; leg. P. Dankittipakul. – MHNG-PDC-457857181554543222-256; Thailand, Chiang Mai Province, Chomthong District, Doi Inthanon NP, Doi Inthanon, on a tree trunk in degraded natural forest interspersed with pine trees behind a guest house, 1200-1300 m; 1 female; 1.-4.7.2002; leg. P. Dankittipakul. – MHNG-PDC-515432321544142114789; Thailand, Phitsanulok Province, Nakhon Thai District, Thung Salaeng Luang NP, Kaeng So Pha Waterfalls, 200-250 m, on tree trunk in dry deciduous forest close to a stream; 1 female; 2.5.2001; leg. P. Dankittipakul.

ETYMOLOGY: The Latin adjective “serratus -a, -um” (= saw like, serrated, saw toothed), refers to the serrated margin of the baso-median process on the TA of the male palp.

DIAGNOSIS: *Hersilia serrata* sp. n. clearly belongs to a presumably monophyletic clade consisting of 10 closely related species known as the *savignyi*-group. The male palpal patella of the *savignyi*-group is characterized by the presence of an elevated dorsal projection carrying minute erect spines (Fig. 15). The male of *H. serrata* sp. n. is distinguished from other members of the *savignyi*-group by the serrated baso-median process of the TA; females by the very broad and heavily sclerotized apices of the bulbous sacs of the spermathecae.

DESCRIPTION

Male holotype: Prosoma 2.5 long, 2.4 wide; opisthosoma 4.0 long, 2.5 wide. PLS 6.9 long, bS 0.9 long, tS 6.0 long.

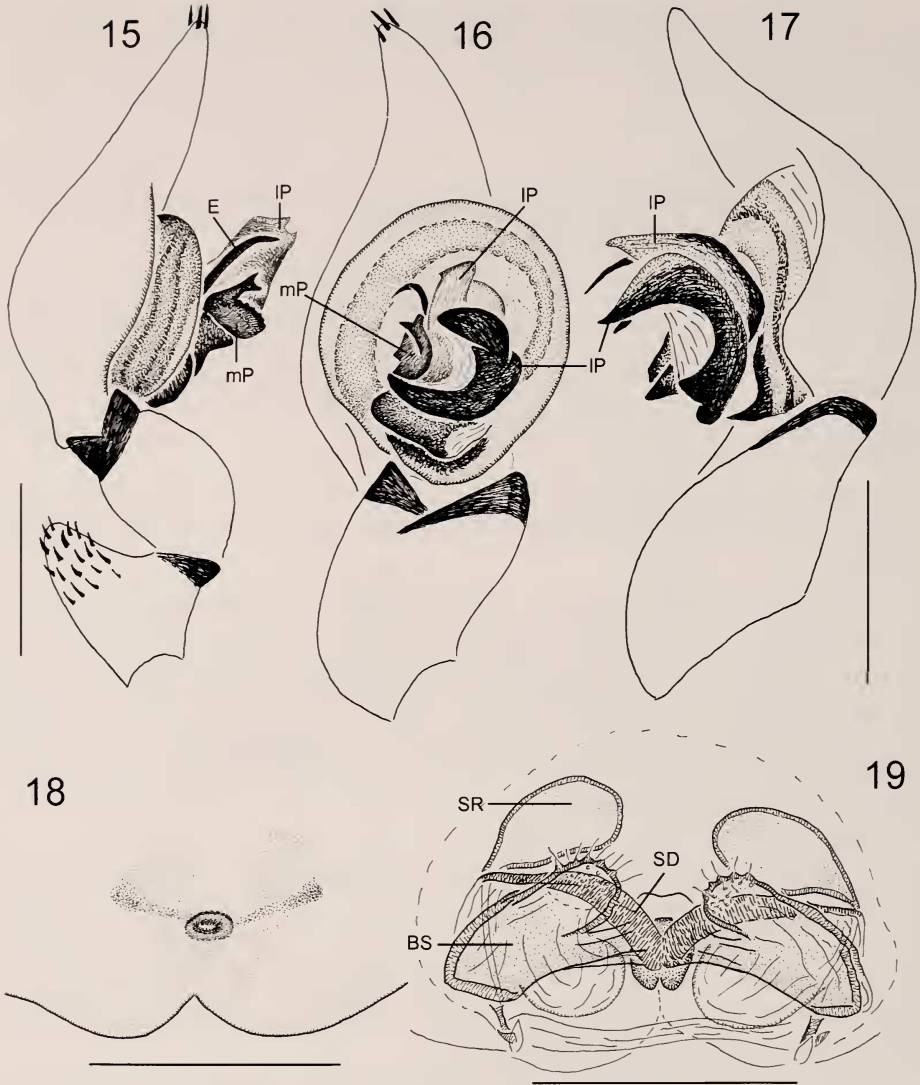
Prosoma: Prosoma almost disc-shaped, as long as wide, with distinct clypeal projection; ocular region relatively low; clypeus about half length of ocular region; chelicerae elongated, slightly less than two times longer than wide; sternum triangular, anterior margin with shallow median incision.

Eye size and interdistances: AME distinctly larger than PME; ALE = PLE > PME; eye ratio: 1.0: 0.80: 0.38: 0.88. AME = 1.0; AME-AME = 0.48; AME-ALE = 0.68; PME = 1.0; PME-PME = 0.62; PME-PLS = 0.84.

Opisthosoma: Opisthosoma ovoid, longer than wide, widest in the middle, posteriorly with triangular anal tubercle; dorsum with four pairs of large circular DMP, second pair largest, first and fourth pairs subequal, slightly smaller than third pair; VMP numerous, forming parallel longitudinal lines but distinctly narrower posteriorly.

Spinnerets: PLS elongated, slightly less than twice as long as opisthosoma; other spinnerets slightly shorter than bS.

Leg measurements: I, 21.64 (5.50, 1.24, 5.82, 8.1, 0.98); II, 22.08 (5.8, 1.1, 5.96, 8.2, 1.02); III, 5.60 (1.84, 0.58, 1.12, 1.32, 0.74); IV, 12.96 (4.88, 0.96, 2.92, 3.22, 0.98).



FIGS 15-19

Hersilia serrata sp. n., holotype (15-17), paratype (18-19). (15) Left male palp, prolateral view. (16) Ditto, ventral view. (17) Ditto, retrolateral view. (18) Epigyne, ventral view. (19) Vulva, dorsal view. Scale lines = 1.0 mm.

Male palp (Figs 15-17): Patella with dorsal projection carrying several short spines. Tibia prolaterally with bifurcated apical portion. Cymbium slender, with three stout apical spines. Bulbus almost globular, posteriorly narrowed. Embolus slender, linear, apex slightly curved, pointing downwards. TA with two processes: baso-median process strongly sclerotized, with bifurcated projection and serrated margin; apico-

retrolateral process with columnar membrane situated apically, and with larger, concave, sclerotized part situated retrolaterally, its apex sharply pointed, directed mesad.

Female paratype (from Chiang Mai): Prosoma 2.8 long, 2.6 wide; opisthosoma 4.2 long, 2.6 wide. PLS 7.52 long, bS 1.10 long, tS 6.42 long.

Prosoma: Prosoma circular, clypeal area protruded, frontal clypeal margin semicircular; ocular region relatively low; clypeus approximately of same height as ocular region; chelicerae elongated, almost twice as long as wide; sternum triangular, anterior margin with shallow median incision.

Eye size and interdistances: Eyes almost subequal; AME largest > ALE = PLE > PME; ratio: 1.0: 0.94; 0.28; 0.90. AME = 1.0; AME-AME = 0.48; AME-ALE = 0.66; PME = 1.0; PME-PME = 0.68; PME-PLE = 0.88.

Opisthosoma: Opisthosoma longer than wide, widest posteriorly, triangular anal tubercle indistinct; dorsum with four pairs of large circular DMP, fourth pair slightly smaller, others subequal; VMP numerous, forming V-shaped longitudinal lines.

Spinnerets: PLS elongated, slightly longer than opisthosoma; other spinnerets shorter than bS.

Leg measurements: I, 21.18 (5.10, 2.02, 5.20, 7.98, 0.88); II, 21.32 (5.62, 1.02, 5.66, 8.1, 0.98); III, 5.02 (1.66, 0.48, 1.02, 1.22, 0.64); IV, 12.4 (4.66, 0.88, 2.86, 3.12, 0.88).

Epigyne and vulva (Figs 18-19, 30): Epigyne an elevated membranous mound, posteriorly slightly higher than in anterior region, posterior margin with deep median incision; oval copulatory orifices situated medially, its margin rebordered, with reddish bands directed obliquely in antero-prolateral and antero-retrolateral direction. Vulva with broad and thickened insemination ducts, directed antieriad, then descending laterad. Receptacula widely separated, ovoid, with tubular stalks. Bulbose sacs of spermathecae rectangular, inclined towards each other, with digitiform pilose apices.

TAXONOMIC REMARKS: Males of the new species closely resemble those of *H. nentwigi* Baehr & Baehr, 1993 (known from Sumatra, Java and Krakatau) in the general shape of the male palp and the possession of baso-median and apico-retrolateral processes on the TA (Fig. 16). Males of both species can be distinguished by the apico-retrolateral process provided with an elongated apical membranous portion directed distad (Figs 16-17) (columnar in ventral view, beak-shaped in retrolateral view in *H. serrata* sp. n., but completely absent in *H. nentwigi*), and by the sclerotized baso-median process with a serrated area absent in *H. nentwigi*). The TA of the male palp also closely resembles that of *H. feai* Baehr & Baehr, 1993 (from Burma) in having an elongated membranous part and a sclerotized, beak-shaped projection directed mesad on the apico-retrolateral process of the TA (Fig. 16); the TA of the new species can be distinguished by the baso-median process being triangular and lacking a bifurcated projection. Males of *H. striata* Wang & Yin, 1985 (from China, Myanmar, Thailand to Java and Sumatra) differ from males of the new species by the TA without a membranous apical part on the apico-retrolateral process and by the baso-median process lacking a serrated area.

Females of the new species are most similar to those of *H. nentwigi* but can be distinguished by the elongated, rectangular bulbose posterior sacs of their spermathecae which are provided with broad, bluntly pointed apices (Figs 19, 30) (apices and bulbose sacs not visible in *H. nentwigi*). Females clearly differ from those of *H. simplicipalpis* (from Khao Yai NP and Doi Suthep-Pui NP) and *H. striata* in the different shapes of their vulvae: large bulbose sacs are present in *H. simplicipalpis*, thickened bulbose sacs in *H. striata*.

DISTRIBUTION: Northern Thailand (Chiang Mai and Phitsanulok Provinces).

Hersilia thailandica sp. n.

Figs 20-24

HOLOTYPE: MHNG-PDC-6546544442244741976-109; Thailand, Chiang Mai Province, Mae Rim District, Queen Sirikit Botanic Garden, 600-700 m, on a tree trunk in degraded forest in front of museum building; 1 male; 6.-13.10.2006; leg. P. Dankittipakul.

PARATYPES: MHNG-PDC-12546554574875655; same data as for holotype; 3 males.

ETYMOLOGY: The specific name is an adjective (“thailandicus, -a, -um”) and refers to the presence of this species in Thailand.

DIAGNOSIS: *Hersilia thailandica* sp. n. belongs to the *pectinata*-group, which is easily recognized by the male palpal patella being short, and the palpal tibia with an elevated dorsal projection carrying a group of long erect spines (Figs 21-23). The new species is most similar to *H. pectinata* Thorell, 1895 from Burma in the similar male palp with an enlarged, ovoid bulbus, an elongated, curved embolus thickening and a T-shaped TA. *Hersilia thailandica* sp. n. can be distinguished from *H. pectinata* by: seven large erected spines on palpal tibia directed anteriad (Figs 21, 23) instead of laterad (almost perpendicular to the axis of the tibia in *H. pectinata*); the embolus terminally abruptly bending distad, gradually narrowing towards its bluntly pointed apex (Figs 20, 22); the ovoid bulbus with enlarged tubular TA (Fig. 22) instead of being a reniform plate.

DESCRIPTION

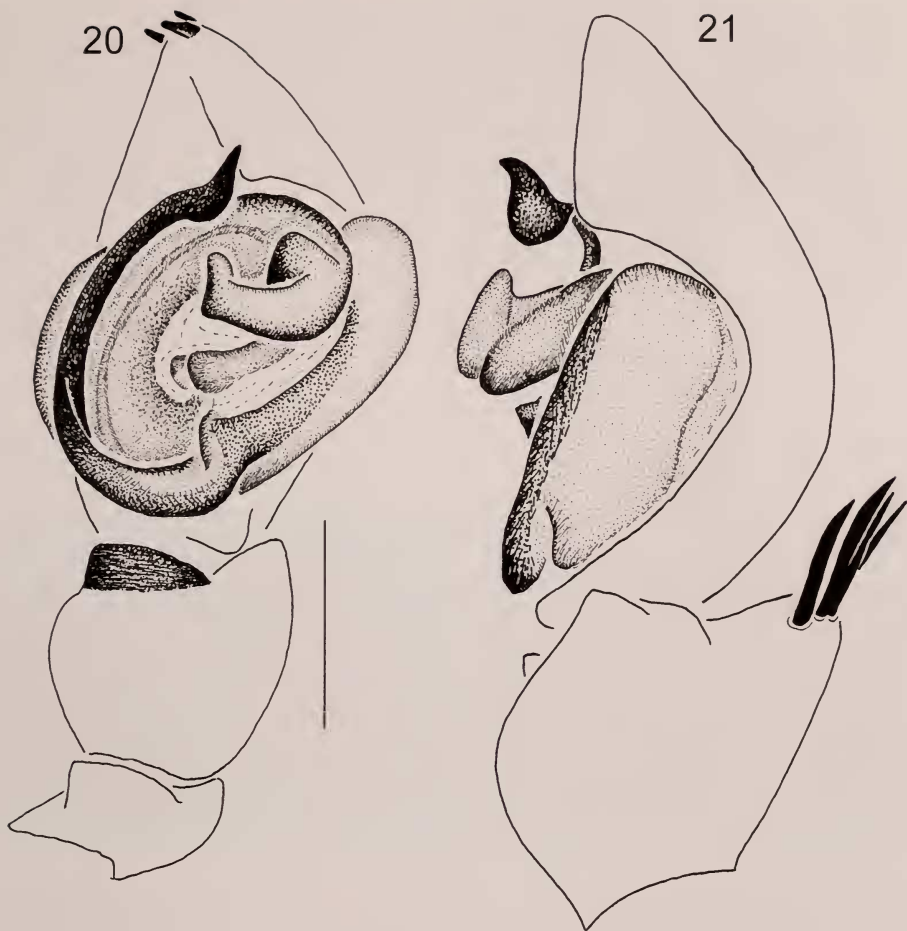
Male holotype: Prosoma 2.8 long, 2.6 wide; opisthosoma 4.4 long, 2.8 wide. PLS 7.3 long, bS 1.1 long, tS 6.2 long.

Prosoma: Prosoma pear-shaped, posteriorly distinctly disc-shaped; ocular region relatively low; clypeus slightly shorter than ocular region; chelicerae elongated, twice as long as wide; sternum triangular, anterior margin with shallow median incision.

Eye size and interdistances: Eyes almost subequal; AME slightly larger than PME; ALE = PLE < AME; eye ratio: 1.0: 0.82: 0.84: 0.96. AME = 1.0; AME-AME = 0.78; AME-ALE = 0.98; PME = 1.0; PME-PME = 0.68; PME-PLS = 0.72.

Opisthosoma: Opisthosoma longer than wide, widest behind the middle, anterior margin almost straight, posteriorly with triangular anal tubercle; dorsum with four pairs of large circular DMP, second pair slightly larger, others subequal; VMP numerous, forming parallel longitudinal lines but distance distinctly narrower posteriorly.

Spinnerets: PLS elongated, twice as long as opisthosoma; other spinnerets not visible in dorsal view.

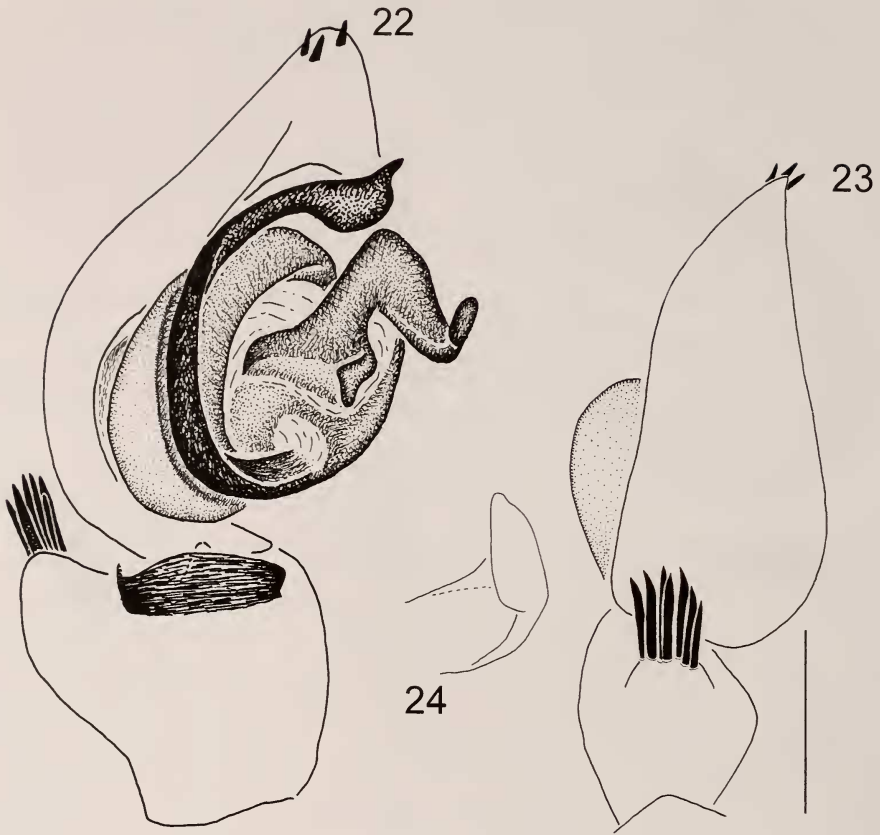


FIGS 20-21

Hersilia thailandica sp. n., holotype. (20) Left male palp, ventral view. (21) Ditto, retrolateral view. Scale lines = 1.0 mm.

Leg measurements: I, 20.24 (4.96, 1.92, 5.02, 7.58, 0.76); II, 20.7 (5.42, 0.98, 5.44, 7.98, 0.88), III, 4.52 (1.46, 0.42, 0.98, 1.12, 0.54), IV 11.7 (4.46, 0.8, 2.58, 3.08, 0.78).

Male palp (Figs 20-24): Tibia short, dorsally with elevated projection carrying seven long erect spines directed anteriad (Fig. 23). Cymbium with three stout apical spines. Bulbus large, ovoid; lateral borders rounded. Embolus broad, heavily pigmented, without accessory process, originating postero-medially, curving in anti-clockwise direction (on left palp), terminally abruptly bending distad, gradually narrowing towards its bluntly pointed apex (Figs 20, 22). TA developed as a large elongated prong, its base broad, with a retro-basal ridge, narrowing to form a tubular stalk and abruptly bending mesad (Figs 20, 22), apex spoon-shaped, curling inwards (Fig. 24).



FIGS 22-24

Hersilia thailandica sp. n., holotype. (22) Left male palp, proventral view. (23) Ditto, dorsal view. (24) Apex of TA, prolateral view. Scale lines = 1.0 mm.

Female: Unknown.

DISTRIBUTION: Known only from the type locality in Chiang Mai Province (Fig. 32).

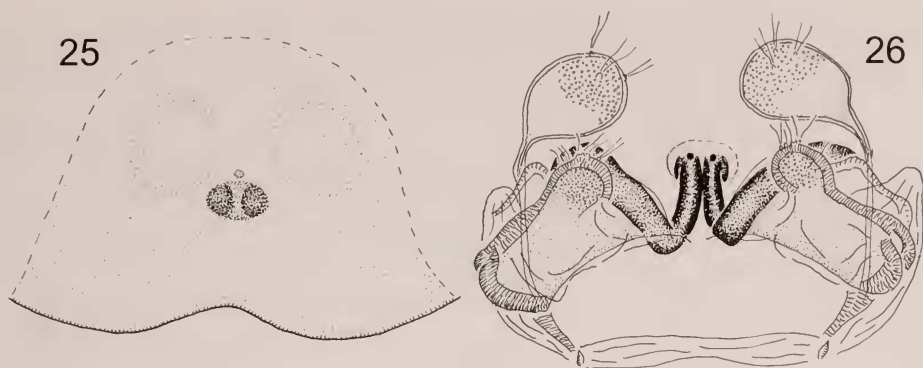
***Hersilia* cf. *striata* Wang & Yin, 1985**

Figs 25-26, 29

Hersilia striata Wang & Yin, 1985: 45, figs 1A-E. – Song, 1987: 117, fig. 79. – Baehr & Baehr, 1993: 37, figs 26c-g. – Song, Zhu & Chen, 1999: 80, figs 12C, 32K-L, 33E. – Chen, 2007: 17, figs 2, 13-18.

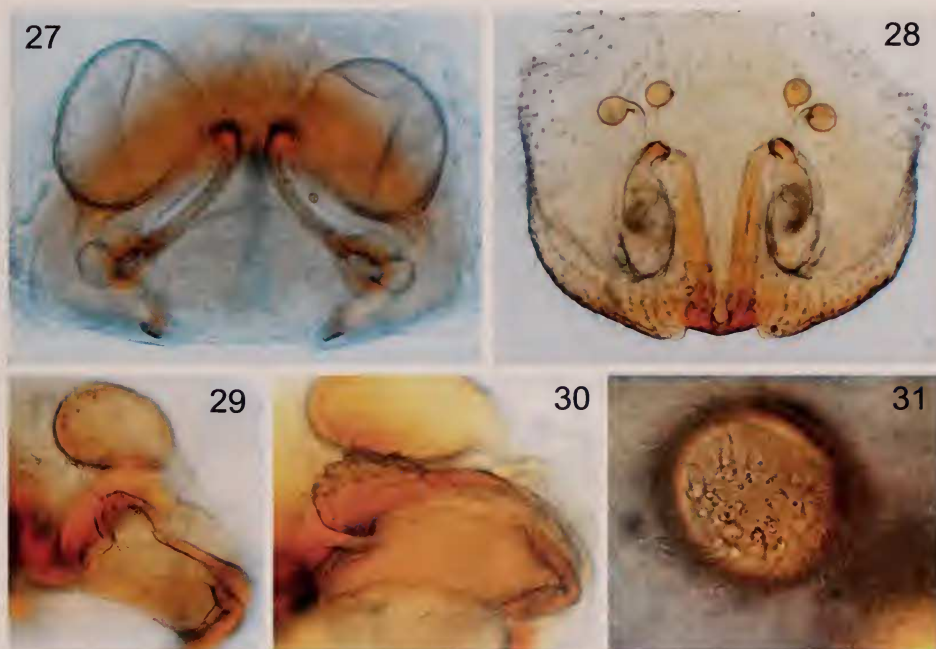
MATERIAL EXAMINED: MHNG-PDC-74164642342654656687; Thailand, Prae Province, Long District, on a trunk of teak in a deciduous dipterocarp forests en route to Prae City; 1 female; 26.5.2002; leg. P. Dankittipakul.

REMARKS: The female examined belongs to the *savignyi*-group on the basis of genital morphology. It is most similar to *H. striata* in having the insemination ducts curving downwards and then ascending laterad, the rectangular bulbous sacs of the



FIGS 25-26

Hersilia cf. *striata*. (25) Epigyne, ventral view. (26) Vulva, dorsal view. Scale lines = 1.0 mm.



FIGS 27-31

Hersilia asiatica (27), *H. sundaica* (28, 31), *H. cf. striata* (29), *H. serrata* sp. n., paratype (30). (27-28) Vulva, dorsal view. (29-30) Right half of vulva, dorsal view. (31) Seminal receptacle.

spermathecae with pilose apices and the ovoid receptacula separated from one other. However, the female examined slightly differ in the shape of the apices on the bulbous sacs which are round and clearly separate from the remaining membranous parts by thickenings (Figs 26, 29). The separation is indistinct and the thickening of the apices

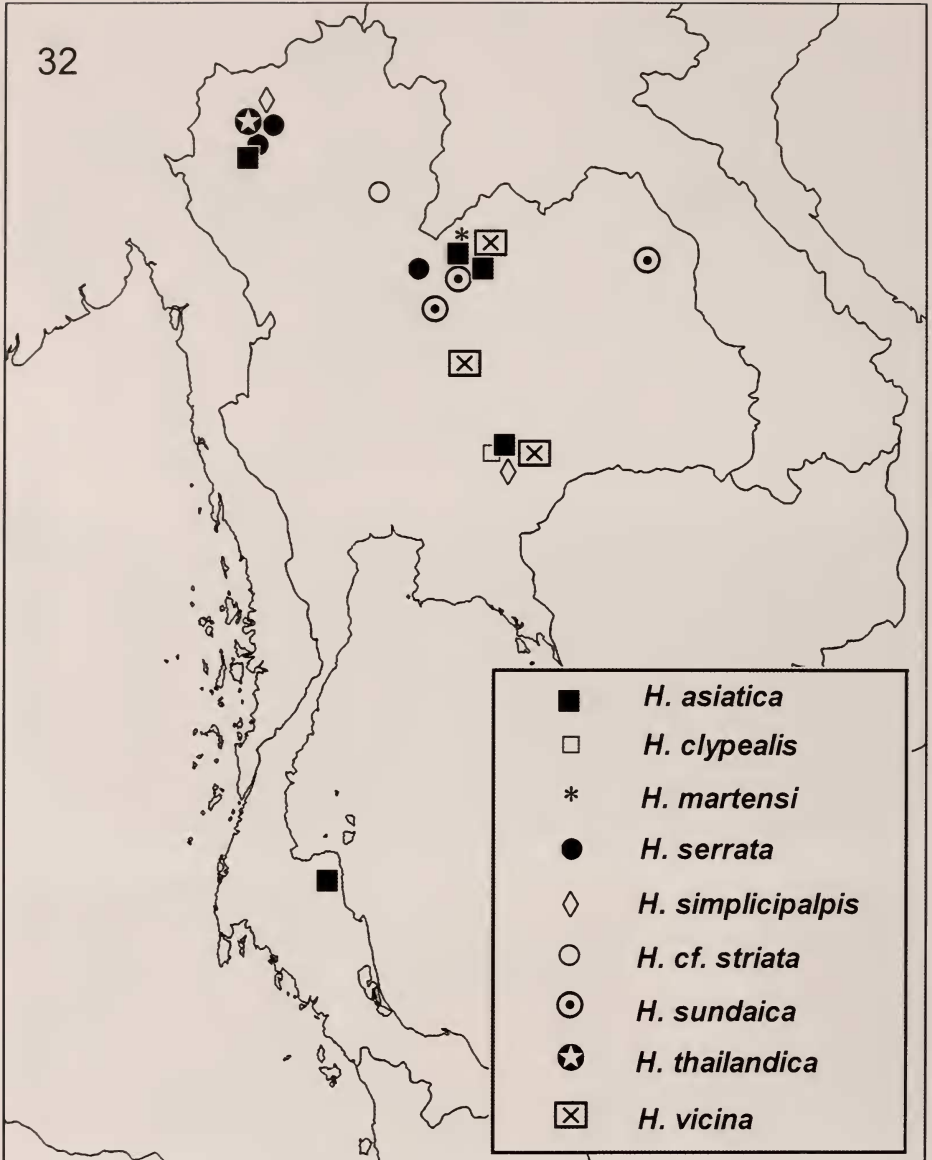


FIG. 32
Currently known *Hersilia* localities in Thailand.

is not prominent in females of *H. striata*. Therefore, the female examined from Thailand cannot be identified with certainty pending an examination of the Chinese types.

DISTRIBUTION: China, Myanmar, Thailand (Sam Roi Yod NP, Prachuap Kirikhan Province, and Doi Inthanon NP, Chiang Mai Province, given by Baehr & Baehr, 1993; Long, Prae Province), Indonesia (Java, Sumatra).

Hersilia spp.

Females of two additional, presumably undescribed species of the *savignyi*-group were found in the provinces of Lampang and Kanchanaburi. They will be formally described as soon as conspecific males are available. Three other *Hersilia* species previously recorded from Thailand are not included in the present study because no new material is available. These taxa are: *H. clypealis* (Khao Yai NP), *H. simplicipalpis* (Khao Yai NP, Doi Suthep-Pui NP), *H. vicina* (Khao Yai NP, Pa Hin Ngam NP, Nam Nao NP).

ACKNOWLEDGEMENTS

We thank Dr Peter Schwendinger for the allowing us to deposit the type specimen at MHNG. He and Dr Barbara Baehr (University of Newcastle, Australia) kindly provided constructive comments on earlier versions of the manuscript. The Thailand Research Fund provided a grant through the Royal Golden Jubilee Ph. D. Program (PHD/0017/2551) to T.S. and P.D. The Graduate School and the Faculty of Science of Chiang Mai University supported P.D. during his study. The Royal Forest Department gave permission to collect spider specimens in national parks and other protected areas. P.D. wishes to express his sincerer gratitude to Dr Angoon Lewvanich (The Royal Academy of Thailand, Bangkok) and Christopher J. Sain (The University of Auckland, New Zealand) for their support throughout the years.

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